



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

INTERBASIN TRANSFER ACT – Request for Determination of Insignificance
For transfers derived from lakes, ponds, or other impoundments
directly or induced through ground water withdrawals

Directions to the applicant: This document provides an outline of all required information. You may either expand upon responses within the document or attach detailed information separately.

1. Summary Sheet

A. Project Information

Project Name	
Location	
Proponent Name, Phone/Email	
Proponent Address	
Submitted by Name, Phone/Email Address	

B. Briefly describe the Proposed Project

C. Has this project been filed under the Massachusetts Environmental Protection Act (MEPA?)

YES <input type="checkbox"/>	NO <input type="checkbox"/>
If Yes, EOEEA Number	
EOEEA Action and Date	

D. List of the local, State, or Federal agencies/commissions from which permits have been obtained or will be sought.

Agency Name	Type of Permit	Project Number

2. Description of the Proposed Interbasin Transfer

- A. Describe the approximate timetable for the proposed action. Include the estimated commencement date and the estimated completion date.
- B. Describe the purpose for which the water is to be transferred.
- C. Provide a map or maps (at an appropriate scale) illustrating in detail, the following information (D through F)
- D. Describe precisely the name and exact location of the source(s) of the proposed transfer of water including the major basin in which they are located.
- E. List the communities, sections of communities, water districts, or other areas that will use the water proposed to be transferred and the major basin(s) in which they reside.
- F. Describe precisely the location of the wastewater discharge point (for both water supply and wastewater transfers) including the major basin in which it is located.

G. Temporary Transfer Evaluation

Please answer the following:	Yes	No
Will the proposed increase in Interbasin Transfer be temporary?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, will it be used:		
(1) To facilitate the construction, maintenance or repair of a public facility?	<input type="checkbox"/>	<input type="checkbox"/>
(2) For flood control purposes?	<input type="checkbox"/>	<input type="checkbox"/>
(3) For public safety purposes?	<input type="checkbox"/>	<input type="checkbox"/>
(4) For another similar purpose not related to water supply use?	<input type="checkbox"/>	<input type="checkbox"/>

- H. State the volume increase in the Interbasin Transfer of water that will result from the proposed action:

(1) Average use, in millions of gallons per day (mgd) on an annualized basis	
(2) Average use, in gallons per minute (gpm)	
(3) In terms of maximum daily transfer (mgd)	

Describe how this increase was determined.

I. Describe the operating schedule of the proposed transfer of water.

3. Impact on the Instream Flow of the Donor Basin

In order to evaluate water supply transfers primarily derived from lakes, ponds, reservoirs or other impoundments either directly or through groundwater withdrawals, in addition to the criteria listed in 313 CMR 4.04(4) (a), (b), (e), and (f) which are outlined elsewhere in this application, the WRC shall use the following criteria per its Interim Policy adopted on December 11, 2014¹:

- That the cumulative annual amount of the transfers including the proposed amount, in all cases, is less than one percent (1%) of the average annual precipitation on the drainage area of the water body, and five percent (5%) of the drought year inflow to the water body.

Long-term average annual precipitation rates for six regions of Massachusetts have been established and are listed in Table 1 (attached). A list of towns corresponding to each region is included in Table 1).

Drought year inflow is the drought basin yield: it is defined as the annualized Q_{90} streamflows in a water source based on averaging estimated near natural monthly Q_{90} streamflows. It is an estimation of the water that would be available in an unimpacted river basin during the probable driest period that is likely to occur. Drought year inflows for each major basin of Massachusetts are listed in Table 2 (attached).

Applicants may use the worksheets on Tables 1 and 2 with the drainage area to the impoundment(s) to calculate the withdrawals that would be potentially available under the Interbasin Transfer Act Interim Policy. Drainage areas for impoundments can be determined using the USGS StreamStats application:

<http://water.usgs.gov/osw/streamstats/massachusetts.html>

For cases where there are multiple reservoirs supplying a system, calculations are to be made using the drainage area to all terminal reservoir(s).

Applicants must provide the following information (A through E below):

¹ MA Water Resources Commission Interim Policy Guidelines for the Interpretation of 313 CMR 4.04(3) and 4.04(4) Request for Determination of Insignificance- As Applied to Transfers Primarily Derived from Lakes, Ponds, Reservoirs or other Impoundments (December 11, 2014)

A. What is the drainage area of the watershed of the proposed source?

_____ square miles

B. Complete worksheets on Tables 1 and 2, provide the potential allowable interbasin transfer under insignificance

Table 1: Average Annual Rainfall value: _____mgd

Table 2: Drought Year Inflow value: _____mgd

C. Describe any proposed flow augmentation provisions, flow protection thresholds, mitigation measures or other measures proposed to protect instream flow.

D. Special resource values:

Provide maps if any of the special resources below are present in the vicinity of the terminal impoundment(s). Mapped extents of these areas are available from online resources listed below.
<p>1. Endangered species of plants and animals (Department of Fisheries, Wildlife, and Environmental Law Enforcement (DFWELE) Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program).</p> <p>http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm</p>
<p>2. Areas of Critical Environmental Concern (ACEC)</p> <p>http://www.mass.gov/eea/agencies/dcr/conservation/ecology-acec/areas-of-critical-environmental-concern-acec.html</p> <p>http://maps.massgis.state.ma.us/map_ol/oliver.php Select Conservation/Recreation, Areas of Critical Environmental Concern ACECs</p>
<p>3. Designated Scenic River</p> <p>http://www.mass.gov/eea/agencies/dfg/der/technical-assistance/wild-and-scenic-rivers.html</p>
<p>4. Geographic areas (e.g., parks, conservation lands) protected by Article 97 of the Amendments to the Massachusetts Constitution</p> <p>http://maps.massgis.state.ma.us/map_ol/oliver.php</p>

Select Openspace, Openspace by Ownership solid, determine if land is Article 97 using info button (the value “1” appears under the column “Article 97” in feature details)

E. Describe the proposed transfer’s impact on other authorized water users in the donor basin. (attach detailed response)

4. Additional Information

Provide any additional information that would be useful to the Commission in reviewing your request (refer to 313 CMR 4.00 and interim policy). Attach detailed response.

	Signature of Responsible Officer	Name (print or type)
Date:		
	Signature of Person Preparing Request (if different than above)	Name (print or type)
Date:		

Table 1 Long-Term Average Annual Rainfall for Six Regions of Massachusetts

Region	Average Annual Rainfall (inches)	Conversion Factor to 1% Average Annual Rainfall MGD/square mile
West	44.67	0.0213
Connecticut River Valley	45.76	0.0218
Central	46.34	0.0221
Northeast	44.11	0.0210
Southeast	46.33	0.0221
Cape Cod and Islands	45.13	0.0215

WORKSHEET:

Drainage area to water supply source surface water impoundment(s) (determined from StreamStats or other delineation):

_____ square miles

X
Conversion Factor from Table 1
(Circle Value used for Donor Basin Region)

=

_____ mgd *

*Potential Interbasin Transfer allowable under insignificance
Enter this value in Application Section 3/Table 1

(If there are sources in more than one region, complete worksheet for each region and add total of results in Section 3/Table 1)

LIST OF MASSACHUSETTS TOWNS BY REGION
For Use with Table 1

CAPE & ISLANDS REGION	CENTRAL REGION	
Barnstable	Ashburnham	West Boylston
Bourne	Ashby	West Brookfield
Brewster	Athol	Westminster
Chatham	Auburn	Winchendon
Chilmark	Barre	Worcester
Dennis	Boylston	
Eastham	Brookfield	
Edgartown	Charlton	
Falmouth	Douglas	
Gay Head	Dudley	
Gosnold	East Brookfield	
Harwich	Fitchburg	
Mashpee	Gardner	
Nantucket	Grafton	
Oak Bluffs	Hardwick	
Orleans	Holden	
Provincetown	Hubbardston	
Sandwich	Leicester	
Tisbury	Leominster	
Truro	Lunenburg	
Wellfleet	Millbury	
West Tisbury	New Braintree	
Yarmouth	North Brookfield	
	Northbridge	
	Oakham	
	Oxford	
	Paxton	
	Petersham	
	Phillipston	
	Princeton	
	Royalston	
	Rutland	
	Shrewsbury	
	Southbridge	
	Spencer	
	Sterling	
	Sturbridge	
	Sutton	
	Templeton	
	Townsend	
	Uxbridge	
	Warren	
	Webster	

**CONNECTICUT
RIVER REGION**

Agawam
Amherst
Ashfield
Belchertown
Bernardston
Blandford
Brimfield
Buckland
Charlemont
Chester
Chesterfield
Chicopee
Colrain
Conway
Cummington
Deerfield
East Longmeadow
Easthampton
Erving
Gill
Goshen
Granby

Granville
Greenfield
Hadley
Hampden
Hatfield
Hawley
Heath
Holland
Holyoke
Huntington
Leverett
Leyden
Longmeadow
Ludlow
Middlefield
Monroe
Monson
Montague
Montgomery
New Salem
Northampton
Northfield
Orange
Palmer

Pelham
Plainfield
Rowe
Russell
Shelburne
Shutesbury
South Hadley
Southampton
Southwick
Springfield
Sunderland
Tolland
Wales
Ware
Warwick
Wendell
West Springfield
Westfield
Westhampton
Whately
Wilbraham
Williamsburg
Worthington

**NORTHEAST
REGION**

Acton
Amesbury
Andover
Arlington
Ashland
Ayer
Bedford
Belmont
Berlin
Beverly
Billerica
Bolton
Boston
Boxborough
Boxford
Braintree
Brookline
Burlington
Cambridge
Canton
Carlisle
Chelmsford
Chelsea
Clinton
Cohasset
Concord
Danvers
Dedham
Dover
Dracut
Dunstable
Essex
Everett
Framingham
Georgetown
Gloucester
Groton

Groveland
Hamilton
Harvard
Haverhill
Hingham
Holbrook
Hopkinton
Hudson
Hull
Ipswich
Lancaster
Lawrence
Lexington
Lincoln
Littleton
Lowell
Lynn
Lynnfield
Malden
Manchester
Marblehead
Marlborough
Maynard
Medford
Melrose
Merrimac
Methuen
Middleton
Milton
Nahant
Natick
Needham
Newbury
Newburyport
Newton
North Andover
North Reading
Northborough
Norwood

Peabody
Pepperell
Quincy
Randolph
Reading
Revere
Rockport
Rowley
Salem
Salisbury
Saugus
Scituate
Shirley
Somerville
Southborough
Stoneham
Stow
Sudbury
Swampscott
Tewksbury
Topsfield
Tyngsborough
Wakefield
Waltham
Watertown
Wayland
Wellesley
Wenham
West Newbury
Westborough
Westford
Weston
Westwood
Weymouth
Wilmington
Winchester
Winthrop
Woburn

SOUTHEAST REGION

Abington
Acushnet
Attleboro
Avon
Bellingham
Berkley
Blackstone
Bridgewater
Brockton
Carver
Dartmouth
Dighton
Duxbury
East Bridgewater
Easton
Fairhaven
Fall River
Foxborough
Franklin
Freetown
Halifax
Hanover
Hanson
Holliston
Hopedale
Kingston
Lakeville
Mansfield
Marion
Marshfield
Mattapoisett
Medfield
Medway
Mendon
Middleborough
Milford
Millis
Millville
New Bedford
Norfolk
North Attleborough
Norton
Norwell
Pembroke
Plainville
Plymouth
Plympton
Raynham

Rehoboth
Rochester
Rockland
Seekonk
Sharon
Sherborn
Somerset
Stoughton
Swansea
Taunton
Upton
Walpole
Wareham
West Bridgewater
Westport
Whitman
Wrentham

WESTERN REGION

Adams
Alford
Becket
Cheshire
Clarksburg
Dalton
Egremont
Florida
Great Barrington
Hancock
Hinsdale
Lanesborough
Lee
Lenox
Monterey
Mount Washington
New Ashford
New Marlborough
North Adams
Otis
Peru
Pittsfield
Richmond
Sandisfield
Savoy
Sheffield
Stockbridge
Tyringham
Washington, West Stockbridge,
Williamstown, Windsor

Table 2. Values for Drought Year Inflow for Interbasin Transfer Act Insignificance applications (For water supply transfers derived from lakes, ponds, or other impoundments directly or through ground water withdrawals)

Major Basin	5% DYI (MGD/sqmi)
Boston Harbor Mystic	0.0173
Boston Harbor Neponset	0.0181
Boston Harbor Weymouth/ Weir	0.0158
Blackstone	0.0193
Charles	0.0188
Chicopee	0.0175
Concord	0.0199
Connecticut	0.0230
Deerfield	0.0178
Farmington	0.0158
French	0.0189
Housatonic	0.0163
Hudson	0.0153
Ipswich	0.0172
Merrimack	0.0208
Millers	0.0154
Narragansett	0.0209
Nashua	0.0186
NoCo	0.0135
Parker	0.0164
Quinebaug	0.0186
Shawsheen	0.0169
SoCo 21a	0.0176
Taunton	0.0230
Tenmile	0.0199
Westfield	0.0148

WORKSHEET:

Drainage area to impoundment(s) = _____ square miles

X 5% DYI (MGD/sqmi) from Table 2 = _____ mgd *
(Circle Value Used for source Donor Basin)

* Potential Interbasin Transfer allowable under insignificance

Enter this value in Application Section 3/Table 2

(If there are sources in more than one basin, complete worksheet for each region and add total of results in Section 3/Table 2)